



# WINEMAKING - FINING

Liquid preparation for flotation, based on vegetable chitosan, free of animal products.

### APPLICATONS IN WINEMAKING

The fining of must – whether through decantation or flotation (see "Guide to Flotation") – is an important stage of the winemaking process.

Animal-origin fining agents are becoming much less popular in the world of wine. **Qi UP XC MES** is a liquid preparation packed with chitosan in a colloidal suspension with tartaric acid. (Please consult EU regulations on the use of tartaric acid in must according to winegrowing region. An addition of 100ml/hl of **Qi UP XC MES** is equivalent to approximately 3g/hl of tartaric acid).

Chitosan, a non-synthetic and allergen-free molecule derived from a fungal source (the "Aspergillus Niger" fungus), presents some very interesting and innovative properties as regards oxidative processes, such as its anti-free-radical effect and ability to interact with colloids. It can also trap "transition metals", such as iron and copper, which act as catalysts for oxidation.

**Qi UP XC MES** presents a high surface charge density at the pH of the wine, a characteristic which gives it great affinity and reactivity to the suspended particles, leading to very rapid flocculation.

**Qi UP XC MES** optimises thiol production by reducing the concentration of ortho-diphenols, which, when subjected to oxygen, become oxidised and form quinones, which act as "aroma traps".

**Qi UP XC MES** can be used in conjunction with Carbo F. In this case, we recommend using our targeted bentonitebased product. Bent'Up to ensure a better sedimentation and clarification.

#### HOW TO USE

Add **Qi UP XC MES** to the must using a Venturi tube or a dosing pump connected to the flotation unit, stirring the must continuously.

Avoid stirring up the must too vigorously, as this could lead to oxidation. Remove the lees within a few hours of them completely separating from the liquid.

#### **RECOMMENDED DOSAGES**

- In white and rosé must: from 20 to 60 mL/hL.
- In red must destined for hot treatment: from 50 to 100 mL/hL.

### PACK SIZES AND STORAGE

#### • 10 Kg

Store in a dry and odourless place, at a temperature between 5 and 25 °C. After opening, close the container tightly. The product should be used within one month.



**Institut Œnologique de Champagne** ZI de Mardeuil - Allée de Cumières BP 25 - 51201 EPERNAY Cedex France **Tél +33 (0)3 26 51 96 00** Fax +33 (0)3 26 51 02 20 *www.ioc.eu.com*  L'information contenue dans cette fiche est celle dont nous disposons en l'état actuel de nos connaissances. Elle ne dispense en rien les utilisateurs de prendre leurs propres précautions et de réaliser leurs propres essais. Toute réglementation en vigueur doit être scrupuleusement observée.



## **TECHNICAL SHEET**

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**Qi UP XC MES,** a chitosanbased liquid preparation, has a strong charge density, therefore agglomerates particles and forms flocs with ease.





After analysing the charge density of our fining formulations, we use the Turbiscan<sup>®</sup> device, which allows us to measure the parameters for the quality of the clarification within the timeframe established for each formulation.

Using a laser beam, we can measure the transmission (in other words, the level of limpidity) of the liquid contained in the tube. The higher the transmission value, the greater the capacity of the fining agent used to flocculate and therefore clarify the wine.

Flotation treatment performed on a Cinsault rosé must (Languedoc – September 2019) - 250hl tank. This test revealed the much greater efficacy of **Qi UP XC MES** at a dosage of 100ml/hl than pea protein at a dosage of 200ml/hl as regards the reduction in the red component a\* at the end of AF (approx. 10%).



As the formulation does not contain any suspension agents, some sedimentation may occur. We recommend re-homogenising the product before use by manually shaking the canister.

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